

Notice of Allowability

Application No.

09/742,523

Examiner

Peng Ke

Applicant(s)

ROGERS ET AL.

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/27/06.
2. ☒ The allowed claim(s) is/are 1,2,4,6-18 and 21-48.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffrey C. Hood on 7/5/06.

The application has been amended as follows:

1. (Currently Amended) A method for creating a graphical program which performs hardware register accesses in a hardware device, wherein the method operates in a computer including a display screen and a user input device, the method comprising:

storing a description of the hardware device in the computer, wherein the description includes mnemonic names of hardware registers;

displaying on the screen a register access node in the graphical program in response to user input; and

configuring the register access node to access one or more hardware registers of the hardware device, wherein said configuring includes accessing ~~[[a]]~~ the description of the hardware device for information regarding the one or more hardware registers of the hardware device;

wherein said configuring the register access node includes:

displaying a list of the mnemonic names of hardware registers on the display;

and

receiving user input selecting one or more of the mnemonic names of hardware registers for access;

wherein, during execution of the graphical program, the register access node is operable to access the one or more hardware registers of the hardware device based on the information accessed from the description of the hardware device.

3. (Canceled)

4. (Currently Amended) The method of claim [[3]] 1,

wherein said configuring the register access node to access one or more hardware registers of the hardware device comprises configuring the register access node to access selected hardware registers described in the description of the hardware device.

5. (Cancelled)

6. (Currently Amended) The method of claim [[5]] 1, wherein the description further includes mnemonic names of fields in the hardware registers;

wherein said configuring the register access node includes:

displaying a list of the mnemonic names of fields in the hardware registers on the display; and

receiving user input selecting one or more of the mnemonic names of fields in the hardware registers for access.

17. (Currently Amended) A method for creating a graphical program which performs hardware register accesses in a hardware device, wherein the method operates in a computer including a display and a user input device, the method comprising:

storing a description of the hardware device, wherein the description includes mnemonic names of hardware registers;

displaying one the screen a first node in response to user input, wherein the first node references the description of the hardware device;

displaying on the screen a register access node in response to user input, wherein the register access node is operable to access the hardware device;

configuring the register access node in response to user input, wherein said configuring comprises:

displaying a list of the mnemonic names of hardware registers on the display; and
receiving user input selecting one or more of the mnemonic names of hardware
registers for access;

connecting the first node to the register access node in response to user input, wherein the first node is operable to provide the description of the hardware device to the register access node;

wherein the register access node receives the description, wherein the register access node is operable to access hardware registers of the hardware device during execution of the graphical program based on the description of the hardware device.

18. (Currently Amended) The method of claim 17, ~~further comprising: configuring the register access node to access selected hardware registers described in the description of the hardware device;~~ the wherein said configuring includes accessing the description of the hardware device for information regarding the selected hardware registers.

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) the method of claim ~~[[20]]~~ 17, further comprising: displaying selected mnemonic names of hardware registers on the display after said receiving user input selecting one or more of the mnemonic names of hardware registers for access.

22. (Currently Amended) The method of claim ~~[[20]]~~ 17, wherein the description further includes mnemonic names of fields in the hardware registers;

wherein said configuring the register access node includes:

displaying a list of the mnemonic names of fields in the hardware registers on the display; and

receiving user input selecting one or more of the mnemonic names of fields in the hardware registers for access.

36. (Currently Amended) A method for creating a graphical program which performs hardware register accesses in a hardware device, wherein the method operates in a computer including a display and a user input device, the method comprising:

storing a description of the hardware device, wherein the description includes mnemonic names of hardware registers;

displaying on the screen a register access node in the graphical program in response to user input, wherein the register access node is operable to access the hardware device;

connecting an input of the register access node to receive the description of the hardware device in response to user input; and

configuring the register access node to access selected hardware registers described in the description of the hardware device in response to user input, wherein said configuring includes accessing the description of the hardware device for information regarding the selected hardware registers of the hardware device;

wherein said configuring comprises:

displaying a list of the mnemonic names of hardware registers on the

receiving user input selecting one or more of the mnemonic names of hardware registers for access;

wherein the register access node is operable to access the selected hardware registers of the hardware device during execution of the graphical program based on the information.

37. (Currently Amended) A memory medium for performing hardware register accesses in a hardware device, the memory medium comprising program instructions executable by a processor to:

display on the screen a register access node in the graphical program in response to user input; and

configure the register access node to access one or more hardware registers of the hardware device, wherein, in configuring the register access node to access the one or more hardware registers of the hardware device, the program instructions are executable by the processor to access a description of the hardware device for information regarding the one or more hardware registers of the hardware device, wherein the description includes mnemonic names of hardware registers;

wherein said configuring the register access node, the program instructions are executable to:

display a list of the mnemonic names of hardware registers on the display; and
receive user input selecting one or more of the mnemonic names of hardware registers for access;

wherein, during execution of the graphical program, the register access node is operable to access the one or more hardware registers of the hardware device based on the information accessed from the description of the hardware device.

43. (Currently Amended) A system for performing hardware register accesses in a hardware device, the system comprising:

a computer including a processor coupled to a memory; and
a hardware device coupled to the computer;
wherein the processor is operable to execute program instructions stored in the memory
to:
response to user input; and
display on the screen a register access node in a graphical program, in

configure the register access node to access one or more hardware registers of the hardware device, wherein, in configuring the register access node to access the one or more hardware registers of the hardware device, the processor is operable to execute the program instructions to access a description of the hardware device for information regarding the one or more hardware registers of the hardware device wherein the description includes mnemonic names of hardware registers;

wherein, in said configuring the register access node,

the processor is operable to:

display a list of the mnemonic names of hardware registers on the dig play; and

receive user input selecting one or more of the mnemonic names of hardware registers for access;

wherein, during execution of the graphical program, the register access node is operable to access the one or more hardware registers of the hardware device based on the information accessed from the description of the hardware device.

48. (Currently Amended) A, method for creating a graphical program which performs hardware register accesses in a hardware device, wherein the method operates in a computer including a display screen and a user input device, the method comprising:

storing a description of the hardware device in the computer, wherein the description includes mnemonic names of hardware registers:

displaying on the screen a register access node in the graphical program in response to user input; and

Art Unit: 2174

configuring the register access node to access one or more hardware registers of the hardware device;

wherein said configuring the register access node includes:

displaying a list of the mnemonic names of hardware registers on the display; and

receiving user input selecting one or more of the mnemonic names of hardware registers for access:

wherein, during execution of the graphical program, the register access node is operable to access the one or more hardware registers of the hardware device.

Reason for Allowance

The following is an examiner's statement of reasons for allowance: The prior arts fail to show individually or in combination that:

wherein said configuring the register access node includes:

displaying a list of the mnemonic names of hardware registers on the display; and

receiving user input selecting one or more of the mnemonic names of hardware registers for access:

wherein, during execution of the graphical program, the register access node is operable to access the one or more hardware registers of the hardware device. in combination with the other claim limitations of the succeeding claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2174

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (571) 272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peng Ke